

## **QUEUING**

At Cowlitz Way (SR 4)/Main Street

- Northbound Cowlitz Way (SR 4) through movement queues extended beyond the adjacent traffic signal at Ocean Beach Highway.
- Westbound Main Street through movement queues extended beyond the adjacent traffic signal at 5<sup>th</sup> Avenue.

#### At Main Street/1st Avenue

- Eastbound through movement queue often extended to 3<sup>rd</sup> Avenue blocking side street access. This occurrs approximately every other cycle.
- Westbound through movement queue occasionally blocked the right turn lane. This only occurred approximately three times during the evening peak hour.

## **SAFETY**

Six study intersections had collision rates that are near or higher than the threshold of 1.0 collision per MEV.\*

- Cowlitz Way / 5th Avenue / Long Avenue (0.98)
- Cowlitz Way / Ocean Beach Hwy / Washington Way / Catlin Street (1.09)
- 7th Avenue / Catlin Street (2.17)
- 5th Avenue / Catlin Street (1.58)
- 5th Avenue / Main Street (1.75)
- 1st Avenue / Main Street (0.91)

\*WSDOT, collision data January 2006 through December 2008

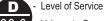
#### LEGEND



- Study Intersection Number



- Queuing Problems



- Volume to Capacity Ratio

# **DKS** Associates



EXISTING SIGNALIZED INTERSECTION OPERATIONS PM PEAK HOUR